

Typification of Dr. Tomitaro Makino's Botanical Names (2)

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As a part of a series of studies on the typification of botanical names published by Tomitaro Makino, proposals for the lectotypification and the verification of other type materials for taxa in the Balsaminaceae, Boraginaceae and Buddlejaceae are presented here.
(Continued from J. Jpn. Bot. 80: 22–26, 2005)

Key words: Balsaminaceae, Boraginaceae, Buddlejaceae, Tomitaro Makino, type.

As a part of ongoing research into the typification of Tomitaro Makino's botanical names, this paper is presented as the second in a series of reports proposing the lectotypification, or otherwise providing verification of the status of potential type material, for taxa in the Balsaminaceae, Boraginaceae and Buddlejaceae.

BALSAMINACEAE

Impatiens hypophylla Makino in Bot. Mag. Tokyo 25: 153 (1911).

Lectotype (Nakai 1939): Prov. Yamato, Tōnomine, Oct. 9, 1908, Nikai 1801 (TI; TNS–isolectotype). **Paratype**: Prov. Tosa, Okunanokawa, Aug. 30, 1905, Oda 581 and 582 as MAK 151135 (MAK); Prov. Higo, Mt. Fukaba, Sept. 23, 1906, M. Kōdzuma s. n. as MAK 61606 (MAK); Aso-gōri, Nakamidzu-mura, Sept. 30, 1906, M. Kōdzuma s. n. as MAK 61610, 61611, 61612 (MAK); Prov. Awa, Aug. 23, 1908, Nikai 1800 (TI; isosyntype in TNS); Prov. Awa, Aug. 1909, T. Makino s. n. as MAK 151134 (MAK).

Japanese name: Hagakure-tsurifune (Makino 1911).

Makino (1911) described only one taxon

in the Balsaminaceae, namely, *Impatiens hypophylla* Makino. The type material of this species has been well verified by Akiyama (1989). One of the original syntypes, Makino's specimen collected at Mt. Fukaba in August 1907, was not found. Two syntypes at MAK cited above as MAK 151134 and MAK 151135 can also be seen on the Makino Herbarium website (Makino Herbarium 1999).

BORAGINACEAE

Eritrichium nipponicum Makino in Bot. Mag. Tokyo 17: 51 (1903).

Lectotype (designated here): Prov. Shinano: Mt. Togakushi, July 12, 1884, R. Yatabe & J. Matsumura s. n. (TI).

Doubtful material: Mt. Togakushi, Aug. ?1903, T. Yagi s. n. as MAK 40915 (MAK).

Japanese name: Miyama-murasaki.

The specimen which Makino cited in the original protologue, Yatabe and Matsumura's collection from Mt. Togakushi, was found at TI. Although the label on the sheet does not bear the collector's name, its date and locality are identical with Makino's citation, and the label is annotated "*Eritrichium nipponicum* Makino (sp. nov.)", with the

words “*Myosotis* sp.” crossed out, in Makino’s own handwriting. Also morphological features of the specimen agree well with those given in the original description. The specimen is therefore considered to be a type for *Eritrichium nipponicum* Makino. The other original syntype, the specimen that Makino cited as “T. Yagi Aug. 1901”, has not thus far been found. At MAK there is a Yagi specimen collected from the same locality in 1903, though the date is recorded as “?1903”. The reason why someone recorded this date as “?1903” is not clear. There is a possibility that this date was 1901 in truth, but in the absence of any evidence to confirm this either way, the specimen should be treated as doubtful. For all these reasons, it is appropriate that the Yatabe and Matsumura specimen should be selected as the lectotype.

Echinospermum matsudairae Makino in Bot. Mag. Tokyo 17: 52 (1903), ut “*matsudairai*”.

Lectotype (designated here): Prov. Shinano: Mt. Togakushi, July 12, 1884, R. Yatabe & J. Matsumura s. n. (TI). **Paratype**: Prov. Shinano: Mt. Togakushi, Aug, 1893, Hitoshi Matsudaira s. n. as MAK 40928 (MAK).

Japanese name: Iwa-murasaki.

The specimen selected as the lectotype here was originally identified as *Myosotis intermedia* Link. on Makino’s label. Above this is written “*Lappula matsudairai* Makino” and below it “*Echinospermum Matsudairai* Makino sp. nov.”, both in Makino’s writing. The other specimen, that at MAK, also bears Makino’s original label with the transcription “*Echinospermum Matsudairai* Makino sp. nov.”. The TI specimen has flowers and the MAK specimen has fruits. Matsudaira’s specimen at MAK was identified by Kitagawa in 1965 and has been annotated as the lectotype by someone on the sheet, though it has never been published as such. The syntype at MAK cited above as

MAK 40928 can also be seen on the Makino Herbarium website (Makino Herbarium 1999).

This taxon is currently accepted as *Hackelia deflexa* (Wahlenb.) Opz.

BUDDLEJACEAE

Buddleja venenifera Makino in Bot. Mag. Tokyo 24: 56 (1910).

Lectotype (designated here): Prov. Ōsumi; Isl. Yakushima, Miyanoura, Sept., 1909, T. Makino s. n. (TI; MAK96455–isolectotype). **Paratype**: Isl. Nakano-shima, unknown date, S. Tashiro s. n. as MAK 96451 (MAK).

Japanese name: Urajiro-fudziutsugi (Makino 1910).

There are three sheets of the Yakushima collection distributed between MAK and TI. The material at TI is composed of two sheets (one is the upper part of the plant with flowers and another is the lower part with stem and leaves only). A. J. M. Leeuwenberg annotated the MAK specimen (MAK96455) as the holotype in 1976, though this specimen is actually one of the syntypes. The other MAK specimen, MAK 96451, is likely the Tashiro specimen which Makino cites in his original publication. However, the specimen does not have a collection date on it, and it is probable that Makino did not provide the date for Tashiro’s collection because it is lacking from the specimen.

Makino (1910) initially described this taxon as a new species but later changed its status to *B. curviflora* Hook. & Arm. var. [β] *venenifera* (Makino) Makino (Makino 1911). Yamazaki (1965) transferred this variety to form status under *B. curviflora* Hook. & Arm. This taxon is currently accepted as *B. curviflora* Hook. & Arm. f. *venerifera* (Makino) T. Yamaz.

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田中伸幸：牧野富太郎博士発表学名のタイプ検討 (2)

この一連の研究では、牧野博士が発表した学名のタイプ標本を分類群ごとに整理し、必要があれば再検討しようとするものである。本稿ではツリフネソウ科、ムラサキ科、フジウツギ科を扱った。ツリフネソウ科については Akiyama (1989) によ

る検討があるので、主としてタイプ標本を MAK の標本番号とともに記すだけにした。ムラサキ科、フジウツギ科については MAK, TI に潜在するタイプ関連標本を整理し、レクトタイプ指定を含めて再検討を行った。 (高知県立牧野植物園)